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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,240	05/03/2007	Mordechai Deutsch	30008	9138

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EXAMINER	
BEISNER, WILLIAM H	

ART UNIT	PAPER NUMBER
1775	

MAIL DATE	DELIVERY MODE
12/09/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/565,240	DEUTSCH ET AL.	
	Examiner	Art Unit	
	WILLIAM H. BEISNER	1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *See Continuation Sheet* is/are pending in the application.

4a) Of the above claim(s) *See Continuation Sheet* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,11,12,17,18,25,38,39,43,44,46,47,51,55,58,64,73,74,81 and 82* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 January 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1-4,11,12,17,18,25,38,39,43,44,46,47,51,55,58,64,73,74,81,82,88,93,94,98,100,120,123,126,135,136,138,145,146,152,157,169,170 and 176.
Continuation of Disposition of Claims: Claims withdrawn from consideration are 88,93,94,98,100,120,123,126,135,136,138,145,146,152,157,169,170 and 176.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :1/19/06; 12/10/07; 6/6/08; 8/1/08; 5/4/09; 6/2/09; 7/26/09; 10/18/09; 1/8/10; 5/25/10; 5/31/10; 6/14/10; 6/22/10; 7/15/10; 8/22/10; 8/30/10; 9/5/10; 9/15/10; 9/16/10; 10/3/10; 10/11/10; 10/20/10; 10/31/10; 11/08/10; 11/15/10; 11/22/10.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I in the reply filed on 10/4/2010 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 88, 93, 94, 98, 100, 120, 123, 126, 135, 136, 138, 145, 146, 152, 157, 169, 170 and 176 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/4/2010.

Information Disclosure Statement

3. The information disclosure statements filed between 1/19/2006 and 11/22/2010 have been considered and made of record.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-3, 5, 11, 12, 17, 18, 25 38, 39, 43, 44, 46, 47, 51, 73, 74 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al.(US 2003/0036188).

With respect to claim 1, the reference of Kim et al. discloses a multiwell plate (100) device with a plurality of wells (170) and subwells (300).

While the reference does not specifically disclose the wells as picowell, the reference discloses that the diameter of the wells may be as small a 1-20 microns (paragraph [0141]. As a result, based merely on the specifics of the use of the device, it would have been obvious to one

of ordinary skill in the art to determine the optimum volumes of the wells while maintaining the intended function of the device.

With respect to claims 2, 3 and 5, the device has the footprint of a standard microplate device (paragraphs [0135] and [0147]-[0151]).

With respect to the positioning and shape and density of the wells recited in claims 11, 12, 17, 18, 25, 38, 39, 73, 74 and 82, based merely on the specifics of the cells to be used, it would have been well within the purview of one having ordinary skill in the art to determine the optimal size; shape and spacing of the wells while maintaining the required function of the device.

With respect to the design of the well forming structure of claims 43, 46, 47 and 51, it would have been well within the level of skill in the art to determine the optimum manner of construction while maintaining the intended function of the device. Note integral and separable structures are not considered to be patentable distinctions.

8. Claims 55, 58 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al.(US 2003/0036188) in view of Thompson et al.(US 4,716,101).

The reference of Kim et al. has been discussed above.

Claims 55, 58 and 64 differ by reciting that the wells are formed of a gel material.

The reference of Thompson et al. discloses that it is conventional in the art to form wells out of a gel material (See column2, lines 63-67).

In view of this teaching, it would have been obvious to one of ordinary skill in the art to form the subwells of the primary reference using a gel material for the known and expected

result of providing an alternative means recognized in the art for forming wells, while providing a material that is known in the art for filtering out background fluorescing compounds when optically interrogating the wells of the device.

9. Claim 81 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al.(US 2003/0036188) in view of Leighton et al.(US 4,308,351).

The reference of Kim et al. has been discussed above.

Claim 81 differs by reciting that the subwells are covered with a gel cover.

The reference of Leighton et al. discloses that use of a gel cover or membrane to hold cells within a culture well is known in the art (column 3, lines 61-67).

In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the subwells of the primary reference with a gel cover as suggested by the reference of Leighton et al. for the known and expected result of isolation of the cells within the subwell while allowing the exchange of nutrients and waste.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference of Vaja (WO 01/02539) is cited as prior art that pertains to the culture of cells within a well including subwells.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM H. BEISNER whose telephone number is (571)272-

1269. The examiner can normally be reached on Tues. to Fri. and alt. Mon. from 6:15am to 3:45pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael A. Marcheschi, can be reached on 571-272-1374. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William H. Beisner/
Primary Examiner
Art Unit 1775

WHB